

# TECHNOLOGY OPTIONS

## Design Technology (GCSE)

This subject provides opportunities to develop an awareness of the nature and significant importance of Design and Technology in a rapidly changing society. It enables students to develop their application of knowledge, skills and understanding of one of the focus areas within an overall design and make based approach. The syllabus offers a system of assessment for GCSE which is based on clear targets and a coherent set of criteria for rewarding positive achievement.

There is a choice of five Design and Technology focus areas. The two year courses focus on one area of the subject that the student will have studied at KS3. The final GCSE grade is determined by an exam (40%) and a design and make project (60%). The courses offered include:

### Design & Technology - Graphic Products, GCSE

The graphic products focus area is about designing and making innovative products which reflect developments in graphics based industries. During the course students will learn to use a variety of graphical techniques to develop a range of 2D work and 3D models as outcomes.

### Design & Technology - Resistant Materials, GCSE

The resistant materials focus area is about designing and making innovative products which reflect developments in industries involved with the use of resistant materials (woods, metals and plastics). During the course students will learn to manufacture artifacts using a range of modern and traditional workshop practices.



### Design & Technology - Systems and Control, GCSE

The systems and control focus area is about designing and making innovative products which reflect developments in the systems and electronics industries. This course will apply some of the knowledge that students will have gained from their Mathematics and Science courses to help produce electronic circuits and to program computer controlled systems (PIC).

### Design & Technology - Textiles, GCSE

The textiles focus area is about designing and making innovative products which reflect developments in the textiles industry. Throughout the course students will explore the use of fabrics and processes to satisfy identified needs in a range of outcomes.



## Design & Technology – Product Design, GCSE



The product design focus area is about designing and making innovative products which may involve the use of a range of appropriate materials. During the course students explore a range of designing techniques including (CAD) solid modeling, 3D modeling and prototyping.

## Engineering (Double Award)

Engineering aims to provide you with the opportunity to develop the skills, knowledge and understanding involved in the making of engineered products, systems and services. The course will involve the study of electrical/electronic/mechanical engineered products.

You will complete the following units of study:

- (i) Design and graphical communication in engineering.
- (ii) Making engineered products.
- (iii) Application of technology in engineering.



Your work will be both continuously assessed and you will do unit tests in the form of short answer questions. Half of the course will be taught during core Technology lessons so if you choose this course you would not take Technology as a core GCSE subject. This course is a Double Award and worth the equivalent of two GCSE.

## BTEC FIRST DIPLOMA IN HOSPITALITY

This is an extremely successful course that aims to provide students with an insight into the Hospitality Industry. The course is run in partnership with Barry College where students will gain hands on experience of a commercial kitchen and restaurant.



Students will learn to prepare all types of food commodities and how to carry out Front of house duties. Parents are invited on several occasions to attend meals prepared, cooked and served by the students.



Students will also have opportunities to be involved in the catering of outside functions and competitions. Some of our students have used this course as an entrance to future careers and some are now working all over the world.



Students are also expected to attend a breakfast workshop once a fortnight in school. Students at the end of two years are awarded with a Pass, Merit or Distinction qualification which is equivalent to four GCSE at C, B, or A. This is a very popular course and demand is high.

## **GCSE CATERING**

This is a very popular course with our students and it involves studying the following aspects:

1. The catering industry
2. Nutrition and menu planning
3. Food preparation and production
4. Technological developments

There is a large practical element to this course and students will prepare a range of food commodities from Bread and bread based products such as pizza and Chelsea buns to pastry, cakes, rice and pasta and meat. Practical is a compulsory part of this course and students will cook at least once a week.



Catering is a very successful area of the technology curriculum and there will be opportunities for students to cater for functions and participate in the Young Chef of the Year competition. Students will also get the opportunity to complete work experience within the catering field.

**Design & Technology (Entry Level)**  
**Skills for Working Life (Entry Level)**

These are two year courses intended to allow candidates who are not quite ready for GCSE subjects to work in a range of materials and prepare them for the world of work.

The related areas are: Graphics, Wood, Metal and Plastics. Successful candidates will receive an Entry Level Certificate and can progress onto GCSE courses.

